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EXAMINER

PARDO, THUY N

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/412,754

Applicant(s)

VERNAU ET AL.

Examiner

Thuy Pardo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7,12,17,19,21-31,34,35,39,43,50-53,56,65,70,73-75 and 79-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 79 and 80 is/are allowed.
- 6) ☒ Claim(s) 1,4,7,12,17,19,21-31,34,35,39,43,50-53,56,65,70,73-75,79 and 81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 19.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Applicant's Amendment and IDS filed on November 13, 2003 in response to Examiner's Office Action has been reviewed. Claims 1, 4, 12, 17, 19, 21-31, 39, 43, 53, 56, 65, 73-75, 79 have been amended, claims 2, 3, 5, 6, 8-11, 13-16, 18, 20, 32, 33, 36-38, 40-42, 44-49, 54, 55, 57-64, 66-69, 71, 72, and 76-78, and claim 81 has been added.

2. Claims 1, 4, 7, 12, 17, 19, 21-31, 34, 35, 39, 43, 50-53, 56, 65, 70, 73-75, and 79-81 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 7, 12, 17, 19-31, 34-36, 39, 43, 50-53, 56, 65, 70, and 73-75 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Liddy et al. (Hereinafter "Liddy") U.S. Patent No. 5,873,056, in view of Kishi U.S. Patent No. 6,041,329, and in further view of Wical US Patent No. 5,930,788.

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As to claim 1, Liddy teaches a computer processing apparatus for classifying a document [see the abstract], comprising:

means for accessing a database structure providing a plurality of different subject matter categories, the database containing a classified vocabulary including a plurality of terms in each of the different subject matter categories with each term being classified in accordance with the subject matter category structure of the database [subject field, ab; lexical database, fig. 3; col. 1, lines 29-64];

means for receiving in computer-readable form a text document to be classified [provide a system for automatic classification of documents, col. 3, lines 6-10];

processor means operable to compare terms appearing in the text document with the terms in the classified vocabulary and to determine from the comparison the category for the document [see 1-11 of fig. 1];

However, Liddy does not explicitly teach means for supplying a signal carrying data representing the text document and data associating the text document with the determined category. Kishi teaches means for supplying a signal carrying data representing the text document and data [signaling the insertion of an item into a library of the data storage subsystem, see the abstract].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to have modified the communication service system of Liddy wherein the themes of a document classified through the use of a classification hierarchy that contains a plurality of categories provided thereof would have incorporated the teachings of Kishi especially the feature of signaling the insertion of an item into a library of the data storage

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subsystem; the motivation being to expand and enhance the versatility of Liddy's system by these features in order to increase the accuracy for communicating with a data storage subsystem [Kishi, col. 3, lines 19-42].

However, neither Liddy nor Kishi teaches a classification data set comprising a plurality of groups of terms with each group being associated with a specific different one of the subject matter categories and each group including a plurality of terms exemplifying the associated category for facilitating disambiguation between different meanings of the same term.

Wical teaches a classification data set comprising a plurality of groups of terms with each group being associated with a specific different one of the subject matter categories and each group including a plurality of terms exemplifying the associated category for facilitating disambiguation between different meanings of the same term [see the abstract; term "bank" may be associated with the category "finance & investment" to connote a financial institution, or may be associated with the category "bodies of water" (e.g., the bank of a river), col. 1, lines 44-62].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature to the Liddy-Kishi's system in order to increase the accuracy of retrieving documents from the database by disambiguating categories assigned to terms or keywords.

As to claim 4, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the processor means is operable to determine the category for the document by determining from the comparison the category or categories of terms in the document, assigning weights to the determined categories for the

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terms, and assigning the document being classified to the category having the highest weighting [ab; col. 3, lines 65 to col. 4, lines 33].

As to claim 7, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claims 1 and 7 above. Liddy further teaches that the processor means is operable, for each term in the classified vocabulary and in the text document, to share a predetermined weighting factor between each category associated with the term [col. 6, lines 25-46].

As to claim 12, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the database also containing a plurality of collocations each collocation being associated with a specific different one of the subject matter categories and each collocation consisting of a plurality of terms exemplifying the associated category [fig. 4, 6A-6B; col. 7. Lines 56 to col. 8, lines 3].

As to claim 17, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 12 above. Wical further teaches that the processor means is operable to disambiguate between different meanings of terms by using the collocations [see the abstract; term “bank” may be associated with the category “finance & investment” to connote a financial institution, or may be associated with the category “bodies of water” (e.g., the bank of a river), col. 1, lines 44-62].

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As to claim 19, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claims 4, 7, and 19 above. Liddy further teaches that the accessing means is arranged to access the collocations from store means separate from the remainder of the database [inherent in the system].

As to claim 20, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches store means configured to store the database [lexical database, ab].

As to claim 21, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches store means storing the database [lexical database, ab].

As to claim 22, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the database structure provides said plurality of subject matter categories as a tree structure consisting of a plurality of main subject matter areas each divided into two or more subsidiary subject matter areas [additional categories or subfield, col. 5, lines 33-42].

As to claim 23, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the database structure provides said

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plurality of subject matter categories such that each category is defined by a subject matter area and a species or genus [table 4, col. 5, lines 46-53].

As to claim 24, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claims 1 and 23 above. Liddy further teaches that the database provides said plurality of subject matter categories such that the species or geni are people, places, organizations, products and technology [tables A-B, col. 10-18].

As to claim 25, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claims 1 and 23 above. Liddy further teaches that the database structure provides said plurality of subject matter categories such that the species or genus are the same for each subject matter area [tables A-B, col. 10-18].

As to claim 26, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the database provides categories in each of the following subject matter areas: the universe, the earth, the environment, natural history, humanity, recreation, society, the mind and human history [see table 4, col. 5, lines 43-53].

As to claim 27, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the database structure is such that, for a given meaning, a term is associated with only one category and different meanings of the same

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term are associated with different categories [various meanings or senses of a word may be assigned thereto multiple, different subject codes, ab].

As to claim 28, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Kishi further teaches that the supplying means comprises means for storing a signal supplied by the supplying means on a computer readable medium [ab; col. 3, lines 1-6].

As to claim 29, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Kishi further teaches that the supplying means comprises means for forwarding a signal supplied by the supplying means to another processing apparatus [ab; col. 3, lines 1-6].

As to claim 30, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches that the supplying means comprises means for displaying the information to a user [displayed to the user, col. 5, lines 23-35].

As to claim 8, all limitations of this claim have been addressed in the analysis above, and this claim is rejected on that basis.

As to claim 31, it is a corresponding method claim of claim 1, and this claim is rejected on that basis.

As to claim 34, it is a corresponding method claim of claim 4. All limitations of this claim have been rejected in the analysis of claim 4 above, and this claim is rejected on that basis.

As to claim 35, it is a corresponding method claim of claim 7. All limitations of this claim have been rejected in the analysis of claim 7 above, and this claim is rejected on that basis.

As to claim 36, all limitations of this claim have been rejected in the analysis of claim 12 above, and this claim is rejected on that basis.

As to claim 39, it is similar to claim 12; therefore, it is rejected under the same rational.

As to claim 43, all limitations of this claim have been rejected in the analysis of claim 19 above, and this claim is rejected on that basis.

As to claim 50, all limitations of this claim have been rejected in the analysis of claim 28 above, and this claim is rejected on that basis.

As to claim 51, all limitations of this claim have been rejected in the analysis of claim 29 above, and this claim is rejected on that basis.

As to claim 52, all limitations of this claim have been rejected in the analysis of claim 30 above, and this claim is rejected on that basis.

As to claim 53, all limitations of this claim have been rejected in the analysis of claims 1 and 12 above, and this claim is rejected on that basis.

As to claim 65, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches means for associating with the document being classified a code representing the subject matter area of the allocation collocation; and means for storing the document together with the associated code [see table A, col. 10, lines 29 to col. Col. 13, lines 10].

As to claim 70, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches carrying processor implementable instructions [inherent in the system].

As to claims 73 and 74, Liddy, Kishi, and Wical teach the invention substantially as claimed as specified in claim 1 above. Liddy further teaches a plurality of collocations for use with the database [fig. 1].

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As to claim 75, it is a corresponding method claim of claim 1. All limitations of this claim have been rejected in the analysis of claim 1 above, and this claim is rejected on that basis.

As to claim 81, all limitation of this claim have been addressed in the analysis above, and this claim is rejected on that basis.

Response to Arguments

4. Applicant argues that the prior art does not teach a classification data set comprising a plurality of groups of terms with each group being associated with a specific different one of the subject matter categories and each group including a plurality of terms exemplifying the associated category for facilitating disambiguation between different meanings of the same term.

As to this point, Examiner respectfully disagrees. Examiner believes that this feature is taught by Wical. Wical teaches that the term “bank” may be associated with the category “finance & investment” to connote a financial institution, or may be associated with the category “bodies of water” (e.g., the bank of a river) [see col. 1, lines 44-62].

5. Applicant's arguments filed on November 13, 2003 have been fully considered but they are not persuasive.

Conclusion

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6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo, whose telephone number is (703) 305-1091. The examiner can normally be reached Monday through Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

The fax phone number for the organization where this application or proceeding is assigned are as follows:

(703) 872-9306 (Official Communication)

and/or:

(703) 746-5616 (*Use this Fax#, only after approval by Examiner, for "INFORMAL" or "Draft" communication. Examiner may request that a formal/amendment be faxed directly to then on occasions*).

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Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-5359, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).



Thuy Pardo
February 25, 2004